

Amendments to the Claims:

Claim 1 (Currently Amended) A device for electromanipulation of chemical species in vivo relative to a target tissue comprising:

a ~~an~~ substantially planar nonconductive sheet conformable to the topography of the surface of array base adapted to be placed coincident to the target tissue;

a plurality of electrode elements secured in spaced apart relation on the sheet array base, the electrode elements adapted to be coupled to an electrical source.

Claim 2 (Canceled)

Claim 3 (Currently Amended) The device of claim 2 wherein the plurality of electrode elements are integral to the sheet base.

Claim 4 (Currently Amended) The device of claim 2 wherein the plurality of electrode elements project from the sheet array base towards the target tissue.

Claim 5 (Currently Amended) The device of claim 1 wherein the electrode elements ~~that~~ are independently addressable.

Claim 6 (Original) The device of claim 1 wherein the electrode elements are addressable as one or more sets.

Claim 7 (Currently Amended) The device of claim 1 wherein the sheet array base is ~~substantially~~ conformable to facilitate contact between the electrodes and the target tissue.

Claim 8 (Currently Amended) The device of claim 1 wherein the sheet array base is substantially rigid with a geometric shape adapted to facilitate contact between the electrodes and ~~a corresponding~~ the target tissue.

Claim 9 (Original) The device of claim 1 wherein the electrode elements are spaced together in sufficient proximity to insure that a peak power of less than 1 kilowatt is needed for electromanipulation of the target tissue.

Claim 10 (Original) The device of claim 1 further comprising one or more fluid reservoirs adapted to deliver chemical species to the target tissue.

Claim 11 (Original) The device of claim 1 wherein the electrical source is integrated within the array base.

Claim 12 (Canceled)

Claim 13 (Canceled)

Claim 14 (Currently Amended) The device of claim ~~13~~ 10 wherein the chemical species are released from the one or more fluid reservoirs responsive to a predetermined schedule.

Claim 15 (Currently Amended) The device of claim ~~13~~ 10 wherein the chemical species are released from the one or more fluid reservoirs responsive to a predetermined time.

Claim 16 (Currently Amended) The device of claim ~~13~~ 10 wherein the chemical species are released from the one or more fluid reservoirs responsive to a predetermined metabolic condition.

Claim 17 (Original) The device of claim 1 further comprising at least one micro plunger adapted to deliver chemical species to the target tissue.

Claim 18 (Original) The device of claim 17 further comprising:

at least one porous electrode element capping the at least one micro plunger whereby chemical species held with the at least one micro plunger are released through the at least one porous electrode element to the target tissue.

Claim 19 (Currently Amended) The device of claim 1 further comprising:

at least one external reservoir adapted to hold chemical species; and

at least one conduit fluidly coupling the at least one reservoir to the sheet array~~base~~ whereby the chemical species are delivered through the at least one conduit to the sheet array~~base~~ for delivery to the target tissue.

Claim 20 (Currently Amended) The device of claim 1 further comprising a thin film of chemical species on the sheet array~~base~~ whereby the chemical species are delivered to the target tissue when the sheet array~~base~~ is coincident to the target tissue.

Claim 21 (Original) The device of claim 20 wherein the chemical species are retained within the thin film by absorption means.

Claim 22 (Original) The device of claim 21 wherein the chemical species are released from the thin film by application of an energy means.

Claim 23 (Currently Amended) A device for manipulation of chemical species in vivo relative to a target tissue comprising:

a ~~nonconductive, conformable~~ substantially planar nonconductive sheet array~~base adapted to be place coincident~~ conformable to the topography of the surface of ~~to~~ the target tissue;

a plurality of electrode elements projecting from the sheet array~~base~~ towards the target tissue, the electrode elements addressable individually, the plurality of electrodes adapted to be coupled to an electrical source;

a control means interposed between the electrical source and the plurality of electrode elements and in circuit communication therein, the control means adapted to establish an electrical potential between at least two electrodes; and

a delivery means adapted to introduce chemical species to the target tissue.

Claim 24 (Currently Amended) A method for electromanipulation of chemical species in vivo relative to a target tissue comprising the steps of:

placing at least one substantially planar nonconductive sheet conformable to the topography of the surface of the target tissue ~~array base~~ coincident to a the target tissue, the at least one sheet ~~array base~~ containing a plurality of electrode elements;

establishing an electrical potential between at least two electrode elements in the plurality of electrode elements;

providing a chemical species coincident to the target tissue;

controlling the electrical potential whereby the chemical species are delivered to the target tissue.

Claim 25 (Currently Amended) The method of claim 24 wherein the electrical potential ~~effects~~ affects electromigration of the chemical species to the target tissue.

Claim 26 (Currently Amended) The method of claim 24 wherein the electrical potential ~~effects~~ affects electroporation of the target tissue.

Claim 27 (Currently Amended) The method of claim 24 wherein the electrical potential ~~effects~~ affects both electroporation of the target tissue and electromigration of the chemical species to the target tissue in substantially concurrent synchronization.

Claim 28 (Currently Amended) The method of claim 24, further comprising the steps of:

establishing a predetermined sequence of electrical potentials for the plurality of electrode elements; and

executing the predetermined sequence.

Claim 29 (Withdrawn) A method for combining at least two distinct chemical species in vivo relative to a target tissue comprising the steps of:

placing at least one array base coincident to a target tissue, the at least one array base containing a plurality of electrode elements;

establishing a first chemical staging location;

establishing a second chemical staging location;

establishing a chemical reaction location;

introducing a first chemical species to the first chemical staging location;

introducing a second chemical species to the second chemical staging location;

establishing an electrical potential between at least two electrode elements in the plurality of electrode elements; and

controlling the electrical potential to migrate the first and second chemical species towards the chemical reaction location.

Claim 30 (Withdrawn) The method of claim 29, wherein the electrical potential effects an oxidation reaction on the first chemical species.

Claim 31 (Withdrawn) The method of claim 29, wherein the electrical potential effects an oxidation reaction on the second chemical species.

Claim 32 (Withdrawn) The method of claim 29, wherein the electrical potential effects an oxidation reaction on a combination of the first and second chemical species.

Claim 33 (Withdrawn) The method of claim 29 further comprising the step of electromigrating a combination of the first and second chemical species from the chemical reaction location to the target tissue.